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The first contact plate 24 as well as the second contact plate 26 are both connected to a voltage source and comprise aluminum so that the billet positioned respectively at the annealing path 22 is heated. The billet is guided by various deflection rollers 28.

Page 9, please delete the first paragraph and substitute with the following:

A13
Subsequent to annealing path 22, the aluminum-comprising billet 14 is moved along a second annealing path 30 which is bordered by the second contact plate 26 and a third contact plate 32.

Page 9, please delete the third paragraph and substitute with the following:

A14
The aluminum-comprising billet 14 - already partly through annealing path 30 in the present given depiction - is cooled by a thin oil 34 prior to the oil being removed from the aluminum-comprising billet 14 by a stripping means, depicted here as die 36.

IN THE CLAIMS:

Please delete Claims at top of page and insert We Claim:

Please delete Claim Nos. 1 through 19, without prejudice, and substitute the following Claim Nos. 20-51:

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20. Annealing apparatus for annealing metallic billets, comprising at least two contact elements made of electrically conducting material which are electrically connected to a voltage source and which receive a billet in such a manner that said billet moves relative to said contact element and an electric current flows through said billet between said elements, and the material of at least one contact element is a metal alloy which is adapted to the material of said billet such that substantially no material from said billet diffuses into said contact element.

21. Apparatus according to claim 20, wherein said billet material is one of aluminum and an aluminum alloy and said contact element material is one of aluminum and an

aluminum alloy.

22. Apparatus according to claim 20, wherein said billet material is a light metal, and said contact element material is made from the same light metal or from an alloy of the same light metal.

23. Apparatus according to claim 20, wherein said billet material is one of aluminum and an aluminum alloy and said contact element material is one of aluminum and an aluminum alloy.

24. Apparatus according to claim 20, wherein said billet can be moved through said annealing apparatus along a predefined transport track.

25. Apparatus according to claim 20, wherein said contact elements between which said billet is contacted for electrical current flow through said billet are produced of substantially the same material.

26. Apparatus according to claim 20, further comprising a plurality of annealing paths, wherein one annealing path includes at least two contact elements for receiving a billet such that during the movement of said billet, an electrical current can flow through said billet between said contact elements and wherein one contact element is encompassed in one or more annealing paths.

27. Apparatus according to claim 20, further comprising at least one guiding means which does not function as contact element under certain circumstances, so that the billet is transported along predetermined sections of a transport track through said annealing apparatus without said billet being subjected to an electrical current flow in said sections.

28. Apparatus according to claim 27, wherein said guiding means comprise one of deflection rollers and comb rollers.

29. Apparatus according to claim 20, further comprising of at least one cold-

processing means through which said billet is drawn, said cold-processing means comprising at least one drawing die, wherein the last drawing in said cold-processing means in the material flow direction is a terminal die.

30. Apparatus according to claim 20, wherein at least one predetermined section of a transport track for moving said billet through said apparatus is a cooling section in which said billet can be cooled.

31. Apparatus according to claim 30, wherein said billet is moved through a cooling medium within said cooling section.

32. Apparatus according to claim 31, wherein said cooling medium is an oil.

33. Apparatus according to claim 30, further comprising a stripping means disposed after said cooling section and adapted to remove coolant from the surface of said billet, the stripping means including a drawing die, wherein said stripping means is arranged such that it can be cooled or lubricated by said coolant.

34. Apparatus according to claim 20, wherein said billet is moved through a protective gas in at least one predetermined section of a transport track for moving the billet through the apparatus.

35. Apparatus according to claim 20, further comprising a cold-processing means, cooling section and a transport track for moving said billet through the apparatus, wherein a section of said transport track arranged between said cold-processing means and said cooling section is provided with protective gas and wherein an annealing path is arranged on said transport track between said cold-processing means and said cooling section.

36. Apparatus according to claim 20, further comprising at least one drawing means for applying a force to said billet to cause said billet to move along a transport track through the apparatus.

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37. Apparatus according to claim 36, wherein said drawing means is a draw disc.

38. Apparatus according to claim 20, wherein said at least two contact elements are provided with separate drive means.

39. Apparatus according to claim 38, further comprising a control and regulating means which controls said drive means of said contact elements so as to prevent any slippage of the billet due to the changing length of said billet.

40. Annealing apparatus for aluminum-containing billets, comprising at least two contact elements made of electrically conducting material which are electrically connected to a voltage source and which receive a billet in such a manner that said billet moves relative to said contact element and an electric current flows through said billet between said contact elements, and the material of at least one contact element is one of aluminum and an aluminum alloy into which substantially no material from said billet diffuses.

41. Apparatus according to claim 40, wherein said billet can be moved through said annealing apparatus along a predefined transport track.

42. Apparatus according to claim 40, further comprising a plurality of annealing paths, wherein one annealing path includes at least two contact elements for receiving a billet such that during the movement of said billet, an electrical current can flow through said billet between said contact elements and wherein one contact element is encompassed in one or more annealing paths.

43. Apparatus according to claim 40, further comprising of at least one cold-processing means through which said billet is drawn, said cold-processing means comprising at least one drawing die, wherein the last drawing die in said cold-processing means in the material flow direction is a terminal die.

44. Apparatus according to claim 40, wherein at least one predetermined section of a

transport track for moving said billet bracket through said apparatus is a cooling section in which said billet can be cooled.

45. Method of manufacturing a metallic, low-stress billet comprising the steps of:
transporting a billet along a transport track, such that said billet comes into contact with at least two contact elements, which are connected to a voltage source, in at least one predetermined section of said transport track;

allowing an electrical current to flow through a segment of said billet between said contact elements during the transport of said billet; and

selecting the material of said contact elements to match to the material of said billet, such that substantially no embrittlement or diffusion arises between the contact element material and the billet material during transport of said billet, or during the flowing of the current through said billet;

wherein the flow of said electrical current through said billet causes said billet to be annealed at low stress.

46. Method according to claim 45, wherein the contact elements are selected to contain aluminum, so as to transport an aluminum-containing billet and to anneal said billet at low stress.

47. Method according to claim 45, further comprising the step of cooling said billet following annealing by means of an oil.

48. Method according to claim 47, further comprising the step of stripping off said oil from said billet employing a drawing die.

Please add the following new claims:

49. Apparatus according to claim 32, wherein said oil is a thin oil.

50. Method according to claim 46, wherein the contact elements are selected to